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# UNITED STATES DEPARTMENT OF AGRICULTURE

BUREAU OF ENTOMOLOGY
FOREST INSECT INVESTIGATIONS

MEMORANDUM TO MR. J. C. EVENDEN

Re: Mountain Pine Beetle Control Project,

Coeur d'Alene National Forest

W. D. Bedard Assistant Entomologist

Forest Insect Laboratory Coeur d'Alene, Idaho July 15, 1935

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MEMORANDUM TO MR. J. C. EVENDEN

Re: Mountain Pine Beetle Control Project,

Coeur d'Alene National Forest

Control work against the mountain pine beetle on the

Coeur d'Alene National Forest was accomplished during the period

from May 4 to June 19, 1935, both by experienced NIRA crews and by

CCC crews in charge of experienced NIRA and ECW foremen. The work

was done from six camps: two NIRA camps, one at Miner's Creek

and the other at Flat Creek, and four CCC camps as follows:

Dedeption Creek, Big Creek, Pine Flats, and Devil's Elbow. In

addition to the regular ECW foremen connected with the CCC camps,

each camp was supplied with a number of NIRA foremen who were

experienced in mountain pine beetle control work and who acted as

facilitating personnel during the duration of the control project.

Prior to the control work all ECW foremen were given training by Mr. T. T. Terrell of the Coeur d'Alene Laboratory in spotting and treating methods used in mountain pine beetle control in white pine. This instruction was given both in the form of lectures and by organizing the foremen into crews which actually spotted and treated infested trees.

The object of this memorandum is to give a detailed account of the project as a whole in order to explain matters which do not appear or are not readily apparent in the ordinary production records usually submitted for these projects. In order to do this properly, each camp will be considered as a unit so that individual problems can be discussed more readily.

### Miner's Creek (NIRA)

This camp was sent out on May 4th, and was the first of the insect-control camps to be established on the Coeur d'Alene in 1935.

Mr. Dee Chapin was in charge of this camp, and his personnel, with two exceptions, comprised good, experienced "bug men". The only difficulty encountered in this camp was the fact that spotting and treating crews were sent, ext at the same time, which made it difficult for the spotting crews to locate a sufficient number of infested trees ahead of the treating crews. The production from this camp was as follows:

Number trees spotted	314
Number trees treated	320 (Decked and burned)
Number acres covered	2,544.5
Number acres estimated to be covered	3,200
Number infested trees per acre	•125
Number infested trees estimated per acre	.142

	Total	Per tree
Cost spotting	\$1,051.39	\$3.28
Cost treating	1,450.79	4.53
Subsistence	391.20	1.22
Camp construction	120.00	•37
Camp manager	141.65	45
	\$3,155.03	\$9.85

It is apparent in the spotting and treating record that six more trees were treated than spotted. This was a result of six trees which were located in a narrow strip of timber between the river and the road and which were treated prior to spotting in order to allow the spotters more opportunity to gain on the treaters.

The difference of 655.5 acres between the estimated acreage to be treated and the actual acreage treated was a result of a large area of burned-over land which was included in the estimated area to be treated.

# Flat Creek (NIRA)

The Flat Creek camp was moved in in a highly disorganized condition, as 12 men and some food arrived at 5:00 p.m. with no tentage, tools, or beds until 10:00 p.m. However, this inconvenience to the men had no effect upon the production of the camp. Mr. Dave Robinson was in charge of this camp, and the only difficulty encountered by him was the distance of the area to be treated from camp. As shown on the accompanying map, considerable time was lost in travel between camp and the infested area. The production from this camp was as follows:

Number trees spotted	292
Number trees treated	292 (Decked and burned)
Number acres covered	1,630
Number acres estimated to be covered	1,580
Number infested trees per acre	.176
Number infested trees estimated per acre	.226

Spotting	Man-days 170-1/2	Total \$ 883.68	Per tree \$3.02
Treating (Includes fire patrol		,,	4700
and mop-up 16 man-days with			
total cost of \$88.16	205	985.59	3.37
Subsistence	53 <b>-1/8</b>	350.80	1.20
Camp construction	. <del>M</del>	204.04	•69
Camp manager	18	100.08	•37
Noneffective (1/2 holiday, Sunday	s)		
Spotting	4-1/2	23.27)	
Treating	9	42.03)	.26
C.Const.	_3	14.01)	
	507-1/8	\$2,603.50	\$8.91

In general, the work at the two NIRA camps was very satisfactory as to spotting and treating. Check-spotting in both areas
showed no missed trees, and all decks examined were thoroughly
burned. The high cost per tree was undoubtedly due to the scattered
infestation and to the amount of time forth in travel to and
from both areas.

### Pine Flats (CCC)

This camp is located on Big Creek just below the mouth of Cabin Creek. The area to be treated comprised 1,760 acres lying mainly in Cabin Creek and Rampike Creek as shown on the attached map. Mr. Bob Lang was camp superintendent, and Mr. Walt Rivers spotting foreman for this camp is as follows:

Number trees spotted	496
Number trees treated (Burned 182 (Peeled 236 (Decked	*
(& then	
(peeled 78 496 Number parasite trees	496 245
Number acres covered Number acres estimated in area Infested trees per acre Estimated trees per acre	1,302 1,760 .381 .233
Man-days spotting	(Overhead 96.5 (CCC 304
Man-days treating	(Overhead 152 (CCC 1,524
Man-days treating (Fire, trail, etc.)	(Overhead 32 (CCC 199
Trees per treating man-day (includes overhead)	.26

The first point to be considered in this camp is the number of

parasite trees (245) as compared with the number of trees treated (496). Practically all of the parasite trees were windfalls which contained only a few attacks by the mountain pine beetle, with the brood from 50 to 90 percent parasitized. This infestation was typical of mountain pine beetle infestations in western white pine in the pine, and showed none of the complications typical of other areas in the Court d'Alens. All windfalls were June attacks with high parasite populations, and approximately 95 percent of all infested standing trees were July and August attacks with heavy broods and very Practically no parasited, of death attacks were found.

As shown on the accompanying map, the area to be controlled was not completed. However, the heaviest portion of the infestation was treated, and I believe that the untreated portion of the area would show only a light, scattered infestation.

The low production per treating man-day is typical of all CCC camps, owing primarily to large-size treating crews. From 10 to 14 men were sent out with each treating crew foreman, when I believe production would have been just as great with eight men to the crew. One hundred and seventy-one man-days were lost on two fires which were merely burning in the duff, and totalled only approximately 4 acres. When men were sent out on fire in the evening, it necessitated their remaining in camp the next day in order to give them compensatory time.

Only one man was\_lest-from-this-eam prior to the expiration of NIRA funds. As in all other CCC camps, when all facilitating

personnel was layed off, ECW foremen and even Blister Rust checkers were sent out with crews to complete the insect control work as far as possible.

# Work and shifted come his come on May 20 th which mose it

was not until May 20th that work was started. Mr. Elton Bentley was camp superintendent in this camp, and Mr. Jim Doyle was spotting foreman. Production from this camp is as follows:

Number trees spotted	358
Number trees treated (Burned 231	
(Peeled 122 353	757
Number acres covered	353 1,972
Number acres estimated in area	2,560
Infested trees per acre	.181
Estimated trees per acre	.360
Man-days spotting (Overhead (CCC	150 258
(000	2.76
Man-days treating (Overhead	124
(CCC	1,248
m	
Trees per treating man-day (includes overhead)	•25
It will be noted that	•69
·	

These five spotted trees which were not treated in this comp

These were June-attacked trees which were not peeled owing to the advanced brood stage, and which had been spotted prior to the beginning of

At the beginning of treating in this area, green foremen were sent out with crews, and as a result poor decks were constructed and poor burns were secured. This situation was rectified by placing a man in charge of burning.

As shown on the accompanying map, practically all of this

area was treated. The uncolored area was not spotted or treated.

The cross-hatched area was medicated but not spotted, because only windfalls were left and those that were examined showed high parasitization. The red area was spotted and treated, and the green area scouted and eliminated because it comprised either reproduction or Douglas fir type.

### Big Creek #1 and Devil's Elbow (CCC)

These two camps will be considered together because the area which they worked adjoined and because they cooperated in treating certain areas. The Devil's Elbow camp, with Mr. D. Lightner as camp superintendent and Mr. Fred Birdsell as spotting foreman, was to treat all of the area east of the north fork of the Coeur d'Alene River, and the Big Creek camp, with Mr. Bob Galespie as camp superintendent and Mr. Harvey Terrell as spotting foreman, was to establish a spike camp at Downey Creek and treat all of the area shown on the attached map within the red line west of the river. However, Big Creek assisted Devil's Elbow by treating all of section 18 that was treated.

The production record for the Devil's Elbow camp is as follows:

Number trees spotted	808
Parasite trees	78
Number trees treated (Burned 414	·
(Peeled <u>452</u>	
866	866
Number acres covered	2,385.4
Number acres estimated in area	3,500
Infested trees per acre	•33 <b>8</b>
Estimated trees per acre	.310
Man-days spotting (Overhead	129.5
( ccc	365
Man-days treating (Overhead	236.5
(ccc	1,928
7	741

Production record, Devil's Elbow camp (Cont.)

Trees per treating man-day (includes overhead)

•37

During the first three days that this camp was in operation no lunches were available, so that the spotting crews were forced to return to camp for lunch. This situation necessitated the running of short strips so as to reach camp on the return trip by noon. Considerable time was lost by this procedure.

It will be noted in the production record that 58 more trees were treated than spotted. This is owing to the fact that a portion of this area was spotted by the foremen while they were in training at Carter prior to the moving in of the CCC camps.

The Big Creek camp experienced more difficulty than any other camp during the insect-control project, probably owing to the fact that the camp superintendent received too much interference from superior forest officers, which of necessity made for poor organization. During the first two days the camp was without trucks, and spotting crews walked from Big Creek to Downey Creek, ran 16 chains of strip, and walked back to Big Creek. When the spike camp was moved in at Downey Creek, only four mules and two horses were available to pack a 100-man camp 3/4 of a mile, which necessitated a large number of overhead man-days for transportation which should have been utilized for insect control. It will be noted below that only 7 days are shown for transportation in the production record for the spike camp. This figure is far below the number of days actually spent in packing by Hunter, Cummings, and Maryott, who were supposed to be NIRA foremen.

As shown on the attached map, the spike camp treated portions of sections 14 and 15, and the production record is as follows:

Trees spotted Parasite trees	511 64
Trees treated (Burned 175	04
(Peeled 336 511	511
Number acres covered	680
Number acres estimated in area Infested trees per acre Estimated trees per acre	2,200 •751 •431
Man-days spotting (Overhead (CCC	68 236
Man-days treating (Overhead (CCC	104 770
Trees per treating man-day	•584
Camp construction (Overhead (CCC	10 238
CCC man-days overhead (flunkies, camp detail, wood, etc.)	225
Overhead man-days subsistence	48
Overhead man-days transportation	7

It will be noted that the spike camp covered the smallest percentage of its area, but has the best production per treating manday. The reasons for the small coverage are, first, the camp was not under way until the 23rd of May; second, three spotting crews were kept in section 14, each crew running separate strip, and the strips often alternating. Also, some strips were run all the way through the section, while others were terminated in the creek bottom by one crew, to be carried on by another crew. This situation resulted in slow spotting and also slow treating, because each number was borne

by three trees in the section, and as the camp foreman did not know where the spotting crews had worked, he did not know how to differentiate on his map between tree 11A, 1B, or 1C. The arrangement in this camp was for the camp manager, Mr. Al Rossman, to handle the camp details and treating, and the spotting foreman, Harvey Terrell, to handle only the spotting. In addition to the above, Mr. Rossman could not secure extra copies of maps from the compassmen, and the spotting foreman cut the original maps in pieces, giving one piece to each treating crew foreman as his map. Some difficulty was encountered with the maps, because the compassmen in two instances neglected to orient their maps properly when mapping the trees.

In spite of these difficulties production per treating man-day shows up well, primarily because the infestation was comparatively heavy, but also because this camp was close to its infested area and all crews were involved only in insect control.

As stated above, the Big Creek camp spotted and treated all of section 18 that was treated. Production records for this camp are as follows:

Number trees spotted	174 27
Number parasite trees Number trees treated (Burned 69	21
(Peeled <u>105</u> 174	1.
Number acres covered	174 324.2 430
Number acres estimated	430
Infested trees per acre	•537
Man-days spotting (Overhead	20
(CCC	57
	-6
Man-days treating (Overhead (CCC	56 404
•	•37
Trees per treating man-day	• 51

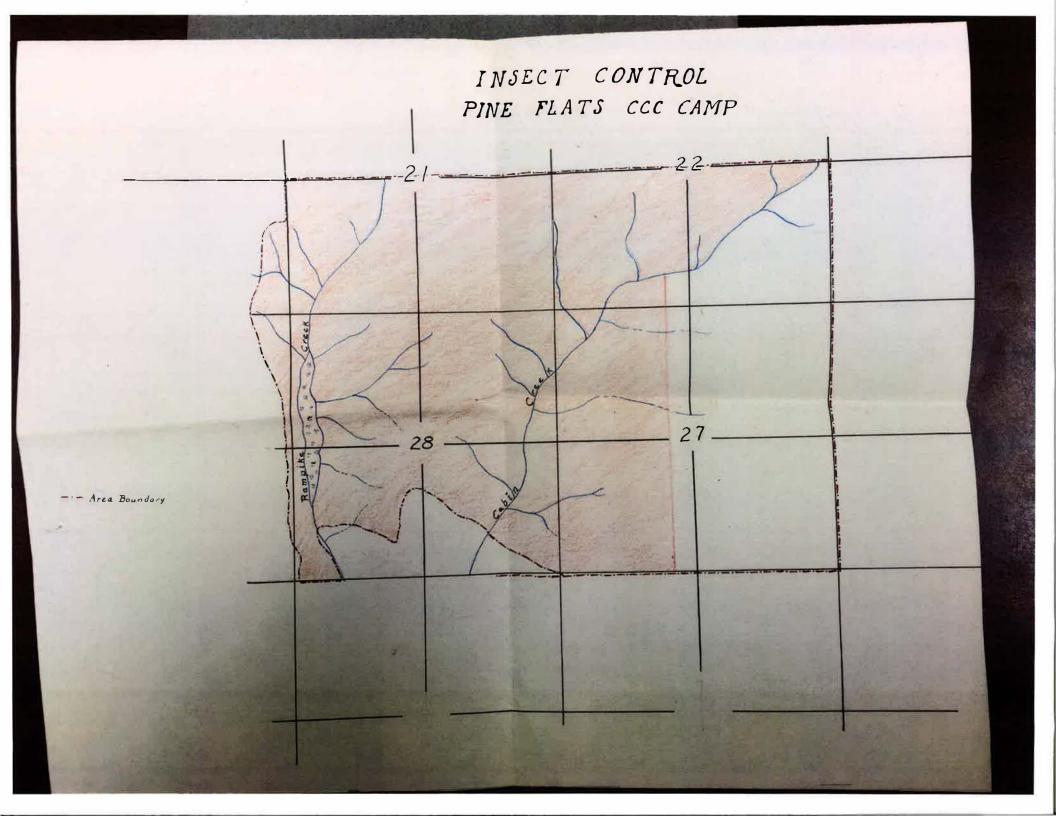
### General Summary

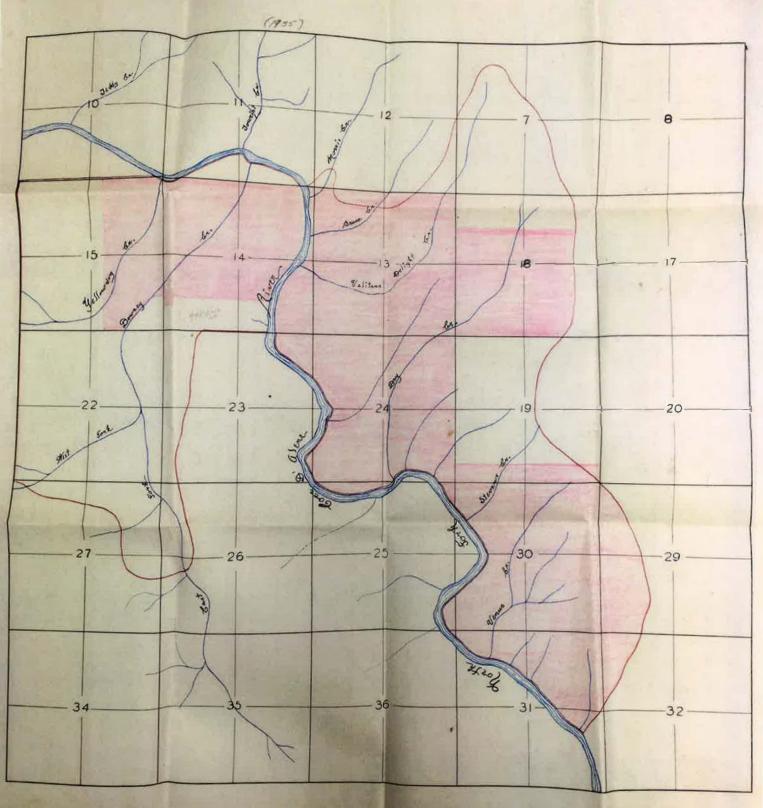
The following are a few general remarks which can be made regarding the CCC camps in general:

- Excellent cooperation was secured from all camp superintendents in regard to acting upon suggestions for improvement.
- 2. When some of the NIRA men were layed off on June 3rd and 5th, and when all remaining NIRA men were layed off on June 12th, ECW foremen were taken from other camp projects and placed on insect control in order to complete the areas already spotted. No complaints were registered by Blister Rust, etc.
- 3. In general, all treating crews were too large. An eightman crew would produce as much work as the larger 10- to

  11-man crews.
- 4. Actual spotting was well done, and but few missed trees were found on check strips.
- 5. In the future, insect control work by CCC camps should be done in the fall whenever possible. The time of arrival of these camps in the spring does not permit sufficient time to complete the work.

Respectfully submitted





## UNITED STATES DEPARTMENT OF AGRICULTURE—FOREST SERVICE

